

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A high-resistance silicon wafer having resistivity of $100\ \Omega\text{cm}$ or more, wherein a carbon concentration is 5×10^{15} to 5×10^{17} atoms/cm³.

Claim 2 (Currently Amended): The high-resistance silicon wafer according to claim 1, wherein an oxygen concentration in the wafer is ~~beyond~~ greater than 8×10^{17} atoms/cm³ (Old-ASTM).

Claim 3 (Currently Amended): The high-resistance silicon wafer according to claim 1 ~~or 2~~, wherein a DZ (Denuded Zone) layer is formed at least $5\ \mu\text{m}$ or more in depth from a surface of the wafer.

Claim 4 (Currently Amended): The high-resistance silicon wafer according to ~~any one of claims 1 to 3~~ claim 1, wherein a density of a LPD (Light Point Defect) having a size of 0.12 or more and observed on a surface of the wafer is controlled so as to be $0.2/\text{cm}^2$ or less.

Claim 5 (Currently Amended): An epitaxial wafer having a high-resistance silicon wafer according to ~~any one of claims 1 to 4~~ claim 1 as a base wafer.

Claim 6 (Currently Amended): An SOI wafer having a high-resistance silicon wafer according to ~~any one of claims 1 to 5~~ claim 1 as a base wafer.

Claim 7 (Currently Amended): The SOI wafer according to claim 6, which is a bonded wafer or SIMOX wafer.

Claim 8 (Currently Amended): A method of manufacturing a high-resistance silicon wafer, ~~characterized in that~~ wherein a heat treatment which is effective in preventing an oxygen donor from being generated is performed on a silicon wafer having a resistivity of $100\ \Omega\text{cm}$ or more and a carbon concentration of 5×10^{15} to 5×10^{17} atoms/cm³.

Claim 9 (Original): The method of manufacturing a high-resistance silicon wafer according to claim 8, wherein a remaining oxygen concentration after the heat treatment is 6.5×10^{17} atoms/cm³ (Old-ASTM) or more.

Claim 10 (Original): The method of manufacturing a high-resistance silicon wafer according to claim 8, wherein the heat treatment is a high-temperature heat treatment at 1100°C or higher.

Claim 11 (Original): The method of manufacturing a high-resistance silicon wafer according to claim 8, wherein the heat treatment is an oxygen out-diffusion treatment for forming a DZ (Denuated Zone) layer on a wafer surface.

Claim 12 (Currently Amended): The method of manufacturing a high-resistance silicon wafer according to claim 11, ~~characterized in that~~ wherein after the oxygen out-diffusion treatment, a heat treatment for forming an oxygen precipitate nucleus, or the heat treatment for forming the oxygen precipitate nucleus and a heat treatment for growing an oxygen precipitate are performed.

Claim 13 (Original): The method of manufacturing a high-resistance silicon wafer according to claim 8, wherein the heat treatment is high-temperature annealing treatment for eliminating a COP which is a void defect caused by a hole from a wafer surface.

Claim 14 (Currently Amended): A method of manufacturing an SOI wafer, ~~characterized by~~ comprising manufacturing an SIMOX type of SOI wafer ~~comprising that~~ comprises a high-resistance silicon wafer having resistivity of 100 Ω cm or more and a carbon concentration of 5×10^{15} to 5×10^{17} atoms/cm³ as a base wafer.

Claim 15 (Original): The method of manufacturing an SOI wafer according to claim 14, wherein a high-temperature heat treatment for forming a BOX layer in a SIMOX type of SOI wafer manufacturing process serves also as a heat treatment which is effective in preventing generation of an oxygen donor.

Claim 16 (Currently Amended): A method of manufacturing an SOI wafer, ~~characterized by~~ comprising manufacturing a bonded type of SOI wafer ~~comprising that~~ comprises a high-resistance silicon wafer having resistivity of 100 Ω cm or more and a carbon concentration of 5×10^{15} to 5×10^{17} atoms/cm³ as a base wafer.

Claim 17 (Original): The method of manufacturing the SOI wafer according to claim 16, wherein the high-temperature heat treatment performed in the bonded type of SOI wafer manufacturing process serves also as a heat treatment which is effective in preventing the generation of the oxygen donor.